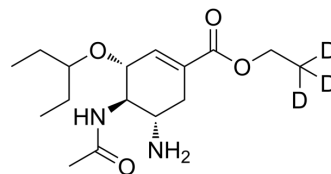


Oseltamivir-d₃-1

Cat. No.:	HY-13317S1
Molecular Formula:	C ₁₆ H ₂₅ D ₃ N ₂ O ₄
Molecular Weight:	315.42
Target:	Influenza Virus
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Oseltamivir-d₃-1 is the deuterium labeled Oseltamivir[1]. Oseltamivir is an influenza virus neuraminidase inhibitor (NAI). Oseltamivir inhibits influenza A/H3N2, A/H1N2, A/H1N1, and B viruses with mean IC₅₀s of 0.67, 0.9, 1.34 and 13 nM, respectively. Anti-influenza A and B agent[2].

In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.
- [2]. O Ferraris, et al. Sensitivity of Influenza Viruses to Zanamivir and Oseltamivir: A Study Performed on Viruses Circulating in France Prior to the Introduction of Neuraminidase Inhibitors in Clinical Practice. *Antiviral Res*. 2005 Oct;68(1):43-8.

Caution: Product has not been fully validated for medical applications. For research use only.

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